

Remote and In-Person Learning in AISD

Implementation, Context, and Outcomes

This report was created in response to a question submitted by an Austin Independent School District Board of Trustees member:

Do we have any data or access to research that shows that during this pandemic, all things being equal, students learning from home are doing worse or better academically than students learning on campus?

Austin ISD Context

Much of the research on virtual learning during the pandemic references hastily assembled online education as a result of pandemic closures. However, in AISD, students either already had or were provided mobile devices, and students who needed WiFi access were provided hotspots. Currently 74,173 students have devices (99% of both low income and non-low income students). A larger number of devices were distributed to low income students during device distribution.

BLEND Rollout and Teacher Professional Learning in AISD

Teachers in AISD were more prepared and had more resources than teachers in districts across the country. Prior to COVID, all AISD teachers had access to and were exposed to BLEND, a teaching technology platform utilized in blended learning settings.

In addition, AISD employs departmental support staff including: Technology Design, Curriculum and Instruction, and Professional Learning. Employees from these departments began writing blueprint courses within BLEND and creating TEKS-aligned learning modules for curriculum appropriate for each grade level and subject. Similarly, the Multilingual Department team members worked to develop blueprints in Spanish for use at the Dual Language schools. Team members helped to design and facilitate training to roll out the blueprints and to encourage teachers to customize and use these resources. Additionally, Professional Learning helped design online training to support instruction.

Lastly, any teacher who was struggling could contact their Technology Design coach or Curriculum and Instruction coach. Every campus is assigned someone in both of these roles, although most campuses share their coaches with other campuses. The above-mentioned blueprints and TEKS-aligned learning modules are still being created for

teachers on an ongoing basis. For these reasons, AISD teachers received support, training, and resources to help with the transition to teaching virtually.

Staff, Caregiver, and Student Surveys

The Department of Research and Evaluation (DRE) deployed surveys to both AISD staff members and students' caregivers shortly after the transition to remote learning to learn their needs and perceptions. Feedback from both groups underscored the need for a single platform that was used uniformly across the district and across grade levels. Previously, teachers were likely to have used BLEND, Class Dojo, Google Classroom and/or other technology learning platforms.

Feedback from these surveys prompted the Curriculum and Instruction staff to collaborate with Professional Learning and Technology Design to use one common platform, BLEND. Therefore, BLEND became the most widely used platform, within which teachers had the option to customize their lessons to meet their needs. Subsequently, trainers and support coaches could focus on supporting teachers to customize courses in BLEND, and to utilize the platform effectively. All PreK-2nd grade teachers also utilize Seesaw in addition to BLEND to support our youngest learners.

The district staff survey from early on in the pandemic, May 2020, shows 68% of teachers felt the district-provided technologies and digital resources (e.g., devices, digital textbooks, apps, software, digital technologies) met the educational needs of students, 41% reported having most or all of the resources they needed to meet the expectations of students' Individualized Educational Plan (IEP) goals, and 71% stated they were able to assess students' performance and track progress (approximately 1,700 teachers responded to the survey).

A teacher survey in the fall, regarding Blueprint material, validated that teachers are relying on the additional content developed by curriculum staff to prioritize certain especially high stakes and high leverage standards. Of the 511 respondents, the majority (85.3%) indicated that the newly identified essential Texas Essential Knowledge and Skills (TEKS) within the Yearly Planning Guides (YPGs) helped focus their instruction. When asked what percentage of the blueprint content they were using each week, almost half of the respondents indicated that they were using 75% or more.

Elementary and secondary student provided feedback about BLEND on surveys that were administered in late fall 2020. The elementary survey had 3,251 respondents, while the secondary survey had 5,114. Elementary survey respondents indicated that 78.8% were learning remotely at least part of the week and that 22.9% were using their own devices, 51.7% were using district Chromebooks, and 25.5% were using district iPads. Secondary survey respondents indicated that 87.7% were learning remotely and that 59.3% were using their own devices while 40.7% were using district Chromebooks. Secondary respondents indicated that they are learning a lot and like school most of the time (34.4%) or all of the time (47.9%). Elementary respondents in grades 3 through 6, indicated that they are learning a lot and like school most of the time (36.3%) or all of the time (49.9%). Secondary respondents reported feeling connected to teachers and classmates all of the time (13.9%) or most of the time (39.1%). Elementary respondents in grades 3 through 6 reported feeling connected to teachers and classmates all of the time (36.3%) or most of the time (49.9%).

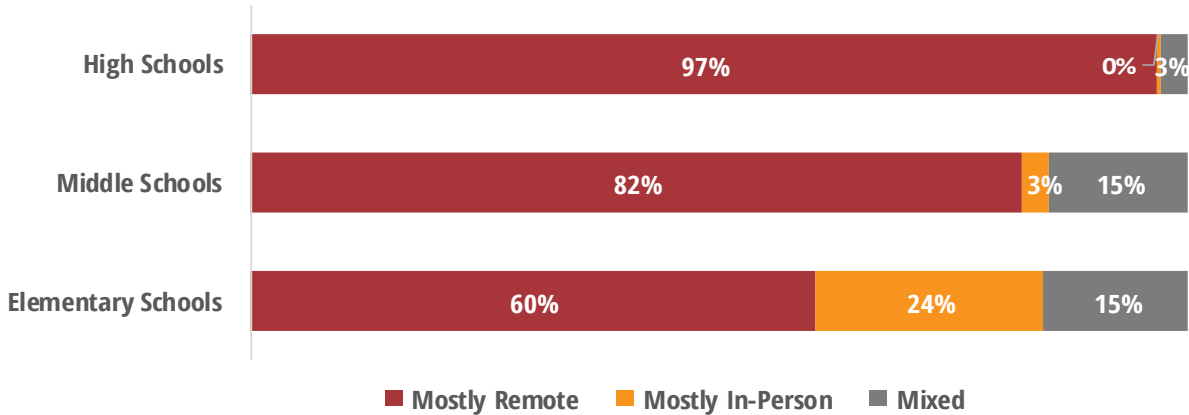
Fall 2020 Student Demographics and Academic Outcomes by Learning Type

Learning Types

To determine the impact of learning type (i.e., remote vs. in-person) on the academic performance of AISD students, we gathered all available data from the Fall semester. Data was limited to the time period within which in-person learning was offered (i.e., October 5th through the end of the semester, except the week following Thanksgiving); thus, covers a time period spanning about 8-9 weeks. Since standardized testing does not occur until the end of the school year, available outcome measures were limited to attendance and course grades. Only the most recent grades from the end of the Fall 2020 semester were included in the analyses. Finally, students were only included in the analyses if they were enrolled at the end of the Fall semester and received a course grade in math or reading/English language arts.

Many students at all grade levels regularly alternated between remote and in-person learning. Analyses separated these students from those who attended school in-person more than 75% of the days they attended and students who participated in remote learning for more than 75% of the days they attended. The vast majority of AISD students opted to learn remotely throughout the Fall 2020 semester, especially at the middle and high school levels (Figure 1). More students in elementary school opted to learn in-person compared to those in middle or high school.

Figure 1
Percentage of Students Participating in Each Learning Type



Source. AISD student records.

Demographics by Learning Type

At all school levels, students who were economically disadvantaged (i.e., eligible for free or reduced price lunch), emergent bilinguals (i.e., English learners), and Black or African American were more likely to attend school in-person than remotely. Hispanic students in elementary and middle school were also more likely to attend school in-person rather than remotely. Table 1 lists the percentages of students choosing each learning type by demographic characteristics.

Table 1
Student Demographics by Learning Type

| | Learning Type | Count | English learners | Special education | Economically Disadvantaged | Hispanic | Black or African American |
|--------------------|------------------|--------|------------------|-------------------|----------------------------|----------|---------------------------|
| Elementary schools | Mixed | 5,521 | 39% | 14% | 62% | 59% | 7% |
| | Mostly in-person | 8,681 | 37% | 16% | 60% | 57% | 7% |
| | Mostly remote | 21,472 | 33% | 12% | 51% | 54% | 6% |
| Middle schools | Mixed | 638 | 38% | 28% | 66% | 65% | 9% |
| | Mostly in-person | 61 | 52% | 40% | 71% | 68% | 16% |
| | Mostly remote | 20,232 | 19% | 10% | 44% | 54% | 6% |
| High schools | Mixed | 2,323 | 35% | 21% | 63% | 61% | 7% |
| | Mostly in-person | 437 | 29% | 34% | 63% | 52% | 13% |
| | Mostly remote | 12,773 | 26% | 14% | 52% | 55% | 6% |

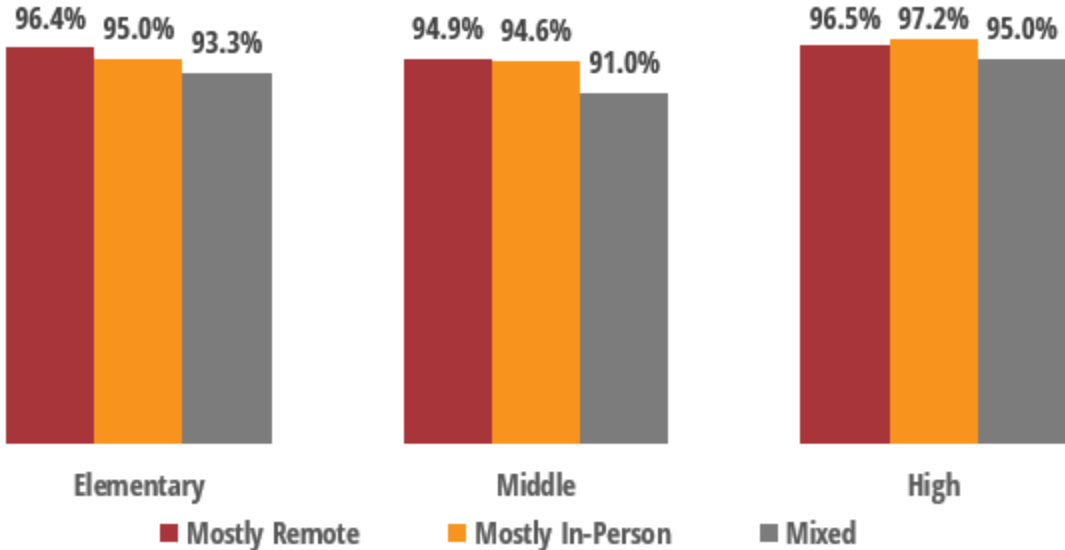
Source. AISD student records.

Academic Outcomes by Learning Type

Attendance

Average daily attendance was better among elementary school students and slightly better among middle school students who participated in remote compared to in-person learning (Figure 2). In high school, average daily attendance was better among students who attended school mostly in-person than among those who attended mostly remotely. At all grade levels, attendance was worst among students who had mixed participation in learning types compared to those who chose either learning type for the majority of their attendance days.

Figure 2
Average Student Attendance Rate by Learning Type

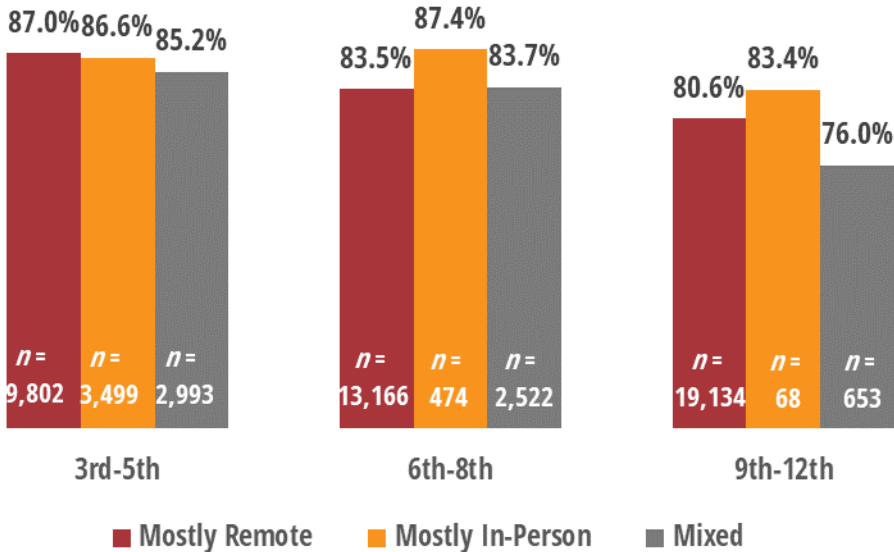


Source. AISD student records.

Grades

There were not many reading or math grade average differences between learning types for elementary school students (Figures 3 through 5). More differences emerged for middle and high school students such that students who attended school mostly in-person tended to receive higher grades in both math and reading/English language arts than those who learned remotely; however, recall there were many fewer students attending in person at the secondary level (Figure 1). Across all school levels, students who used mixed learning types scored lower than those who more consistently used one learning option for a majority of the school days they attended.

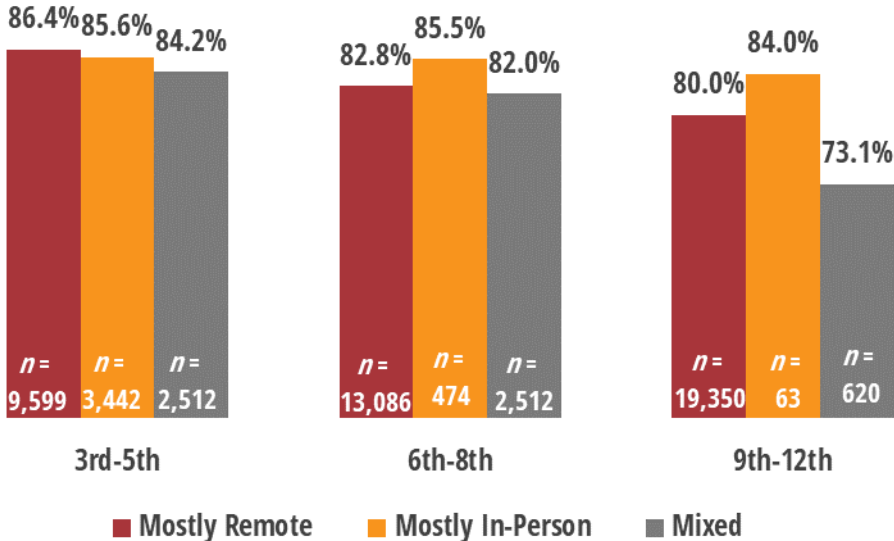
Figure 3
Average Reading/English Language Arts Course Grades by Learning Type, 3rd through 12th Grades



Source. AISD student records.
Note. Most recent grades are reported (3rd 6-week grading period or 2nd 9-week grading period, as applicable). A small number of 3rd-5th grade students who were scored on a 4-point scale were excluded. A-F grades were converted to percentages using the district grading scale.

Figure 4

Average Math Course Grades by Learning Type, 3rd through 5th Grades

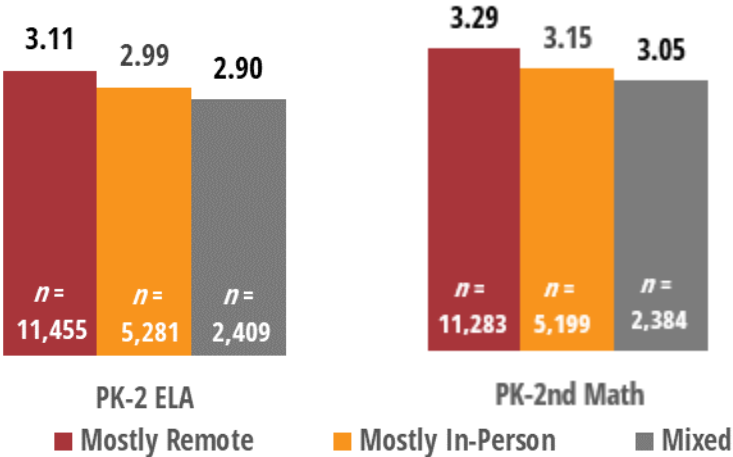


Source. AISD student records.

Note. Most recent grades are reported (3rd 6-week grading period or 2nd 9-week grading period., as applicable). A small number of 3rd-5th grade students who were scored on a 4-point scale were excluded. A-F grades were converted to percentages using the district grading scale.

Figure 5

Average Reading/English Language Arts and Math Course Grades by Learning Type, Pre-K through 2nd



Source. AISD student records.

Note. Most recent grades are reported (2nd 9-week grading period). All grades were on a 1-4 point scale.

Key Findings

- ◆ AISD was ahead of the curve at the beginning of the COVID-19 pandemic with all teachers having prior experience with BLEND, and many students already having 1:1 technology devices.
- ◆ Course blueprints, TEKS aligned learning modules, and remote-learning focused trainings created by various AISD departments enhanced our ability to provide high quality remote instruction in the fall 2020 semester and beyond.
- ◆ In May, the majority of surveyed teachers at AISD felt the district provided adequate technologies and digital resources to meet students' educational needs. In December, teachers voiced concerns about the effectiveness of hybrid teaching (concurrently teaching in-person and remote students) as well as the safety of teaching on campus.
- ◆ Over half of surveyed secondary and elementary students reported feeling connected to their teachers and classmates all or most of the time in fall 2020 while learning remotely. Over 75% of both elementary and secondary students indicated they learned remotely at least part of the week.
- ◆ The majority of students were participating in remote learning in fall 2020, and only a small minority were participating in person.
 - ◇ 60% of elementary students were mostly remote, leaving 8,681 students mostly in person.
 - ◇ 82% of middle school students were mostly remote, leaving only 437 students mostly in person.
 - ◇ 97% of high school students were mostly remote, leaving only 61 students mostly in person.
- ◆ Across all school levels, students who had a mixed learning style (a similar combination of in-person and remote learning), had the poorest average daily attendance.
- ◆ At elementary and middle school levels, students who participated remotely had slightly better attendance than those who participated in person, but this was flipped at the high school level.
- ◆ Math and reading/English language arts course grades at the elementary level (grades PK-5) were comparable between mostly remote and mostly in-person learning types, but slightly favored the mostly remote group.
- ◆ Math and reading/English language arts grades at the secondary level (grades 6-12) were moderately better for the minority of students who participated in-person.
- ◆ Taking into account teacher concerns regarding the difficulties and lower effectiveness of a concurrent teaching model (i.e., teachers simultaneously teaching students who were learning remotely and in-person) along with the relatively low number of students attending in-person school, the district may consider reorganizing teacher positions so that teachers are only instructing either in-person or remote students.

AUSTIN INDEPENDENT SCHOOL DISTRICT

Paige DeBaylo, Ph.D. Michelle Lucas, Ph.D. Dana Minney, M.S.
Cinda Christian, Ph.D. Helen Poulsen, Ph.D. Holly Williams, Ph.D.

Department of Research and Evaluation

4000 S IH 35 Frontage Road | Austin, TX 78704
512.414.1724 | fax: 512.414.1707
www.austinisd.org/dre | Twitter: @AISD_DRE

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